

LPDES PERMIT NO. LA0055638, AI No. 3377

LPDES STATEMENT OF BASIS
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. **Company/Facility Name:** MacKenzie Company, LLC
78015 Chemical Road
Bush, Louisiana 70431
- II. **Issuing Office:** Louisiana Department of Environmental Quality
(LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. **Prepared By:** Sonja Loyd
Industrial Water Permits Section
Water Permits Division
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Date Prepared: July 14, 2008

IV. **Permit Action/Status:**

A. Reason For Permit Action:

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901, and 4903.

- B. LPDES permit - LPDES permit effective date: June 1, 2002
LPDES permit expiration date: May 31, 2007

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- C. Application received on December 1, 2006. Additional information received via email correspondence on March 20, 2007, May 9, 2007, July 8, 2008, July 14, 2008, July 15, 2008, July 18, 2008, and July 22, 2008.

V. Facility Information:

- A. Location - 78015 Chemical Road in Bush, St. Tammany Parish
(Latitude 30°33'30", Longitude 89°52'48")

- B. Applicant Activity -

According to the application, MacKenzie Company, LLC, is an existing specialty chemical manufacturing facility which manufactures primarily metal (Aluminum, Iron, and Nickel) acetylacetonates and dimethylglycine. The facility previously manufactured acetylacetonates using chemicals containing chrome. However, the facility has not manufactured any products containing chrome in over 2 years. All process wastewaters are pumped into storage tanks in a covered and bermed area prior to being shipped off-site for treatment and disposal. The facility also performs custom blending of chemicals for industrial cleaning products and oil field applications. This operation involves dissolving chemicals into a blend, drumming the product, and shipping the product with no waste production. Oil wastes are sent off-site for recycling. The flammable hazardous wastes are sent off-site for disposal by legal incineration.

This facility discharges low contamination potential stormwater runoff (Outfalls 001 and 003) and treated sanitary wastewater (Outfall 002).

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Organic Chemicals, Plastics,
and Synthetic Fibers

Reference

40 CFR 414, Subparts
Subparts H and J

- (*1) This effluent guideline is applicable to this facility; however, it will not be applied since the facility will not be discharging process wastewater.

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Other sources of technology based limits:

Current Permit (effective June 1, 2002)
LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens
(LDEQ) to Myron Knudson (EPA Region 6)
Multi-Sector General Permit
State Empirical Limits
Area-Wide Policy for St. Tammany Parish
LDEQ Sanitary General Permits
Best Professional Judgement (BPJ)

- D. Fee Rate -
1. Fee Rating Facility Type: Minor
 2. Complexity Type: II; set using BPJ - see Section VIII.A
 3. Wastewater Type: III
 4. SIC codes: 2869, 2819, and 2899

VI. Receiving Waters:

STREAM - unnamed drainage ditch, thence into Talisheek Creek

BASIN AND SUBSEGMENT - Pearl River, Subsegment No. 090204

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. fish and wildlife propagation

VII. Outfall Information:

Outfall 001

- A. Type of wastewater - low contamination potential stormwater runoff
- B. Location - at the point of discharge near the parking lot adjacent to the front gate of the facility prior to combining with other waters at Latitude 30°33'32", Longitude 89°52'49".
- C. Treatment - None
- D. Flow - Intermittent, (Max 30-Day) 0.0107 MGD
- E. Receiving waters - unnamed drainage ditch, thence into Talisheek Creek
- F. Basin and subsegment - Pearl River Basin, Subsegment No. 090204

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Outfall 002

- A. Type of wastewater - treated sanitary wastewater
- B. Location - at the point of discharge from the chlorinator located adjacent to the office building prior to combining with other waters at Latitude 30°33'34", Longitude 89°52'48".
- C. Treatment - treatment of sanitary wastewaters consist of:
- aerated septic tank and chlorinator
- D. Flow - Continuous, (Max 30-Day) 0.0008 MGD
- E. Receiving waters - unnamed drainage ditch, thence into Talisheek Creek
- F. Basin and subsegment - Pearl River Basin, Subsegment No. 090204

Outfall 003

- A. Type of wastewater - low contamination potential stormwater runoff
- B. Location - at the point of discharge on the west side of the boiler house prior to combining with the waters at Latitude 30°33'29", Longitude 89°52'54".
- C. Treatment - None
- D. Flow - Intermittent, (Max 30-Day) 0.0022 MGD
- E. Receiving waters - unnamed drainage ditch, thence into Talisheek Creek
- F. Basin and subsegment - Pearl River Basin, Subsegment No. 090204

VIII. Proposed Permit Limits:

Summary of proposed changes from the current LPDES permit:

- A. The complexity designation will be changed from "VI" to "II" since the permittee does not discharge process related wastewater.
- B. Outfall 001

A monitoring requirement for Total Nickel will be added to the draft permit for data gathering purposes since the permittee will be manufacturing products that contain this constituent.

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The outfall location description will be changed from "at the point of discharge from the north side of the facility prior to combining with other waters" to "at the point of discharge near the parking lot adjacent to the front gate of the facility prior to combining with other waters".

C. Outfall 002

The outfall location description will be changed from "at the point of discharge from the chlorinator prior to combining with other waters" to "at the point of discharge from the chlorinator located adjacent to the office building prior to combining with other waters".

A footnote will be added to change the statistical basis for the Fecal Coliform limit from weekly average to a daily maximum.

D. Outfall 003

A monitoring requirement for Total Nickel will be added to the draft permit for data gathering purposes since the permittee will be manufacturing products that contain this constituent.

The outfall location description will be changed from "at the point of discharge from the south side of the facility prior to combining with other waters" to "at the point of discharge on the west side of the boiler house prior to combining with the waters".

E. The facility discharges to a Water Quality Act 303(d) stream. Therefore, a reopener clause will be added to Part II of the draft permit in the event that the permit requires reassessment regarding 303(d) status, resulting in incorporation of the results of any future Total Maximum Daily Load (TMDL) allocation for the receiving waterbody.

F. Updated Part II conditions for stormwater discharges associated with industrial activities will be established in the draft permit.

G. The provision in the Part II conditions that required submittal of DMRs to the Southeast Regional Office will be removed from the draft permit. All DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are scanned into the Electronic Document Management System which is accessible to all LDEQ personnel.

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IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

A. Outfalls 001 and 003 - low contamination potential stormwater runoff

Low contamination potential stormwater runoff being discharged to a discrete outfall receive BPJ limits and monitoring requirements according to the following schedule:

PARAMETERS	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY
Flow (MGD)	Report	Report	1/2 weeks
TOC	---	50 mg/L	1/2 weeks
Oil and Grease	---	15 mg/L	1/2 weeks
Ammonia Nitrogen	---	10 mg/L	1/2 weeks
Total Chromium	---	0.15 mg/L	1/2 weeks
Total Iron	---	3 mg/L	1/2 weeks
Total Nickel	---	Report (mg/L)	1/2 weeks
pH	6.0 S.U. (Min)	9.0 S.U. (Max)	1/2 weeks

(*1) When discharging.

Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements will be retained from the current permit, effective June 1, 2002.

TOC and Oil and Grease - limits are established by BPJ using the LDEQ Stormwater Guidance and the Multi-Sector General Permit. These requirements will be retained from the current permit, effective June 1, 2002.

Ammonia Nitrogen - limit is established by BPJ using the Area-Wide Policy of St. Tammany Parish. This requirement will be retained from the current permit, effective June 1, 2002.

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Total Chromium - limit is established by BPJ using the BAT state empirical limits for hazardous waste sites. According to information provided in the 2006 Application, the permittee previously manufactured products using chemicals containing chrome. However, the permittee has not manufactured any products containing chrome in over 2 years. The limit for this parameter will be retained at Outfalls 001 and 003 since Total Chromium was detected in the permittee's discharges as evidenced by the effluent violation reported on the November 2006 Discharge Monitoring Report for Outfall 001. This requirement will be retained from the current permit, effective June 1, 2002.

Total Iron - limit is established by BPJ using previous permits. During the March 20, 2007 Inspection, the permittee indicated that this constituent was previously pulverized in an open area several years ago which allowed dust from the grinder to disperse on-site. However, as of 2004, this process is now being performed in a room built inside of an existing building. Due to the time that has elapsed since the permittee began performing this activity under roof, the permittee believes that the detection of Total Iron in its stormwater discharges, as evidenced by the effluent violations, is from naturally occurring conditions in the area. The permittee has indicated that it will gather additional data from stormwater samples collected from the ambient area to submit to this Office to support its claim. This requirement will be retained from the current permit, effective June 1, 2002.

Total Nickel - a monitoring requirement is established by BPJ for data gathering purposes since the permittee will be manufacturing products that contain this constituent.

pH - limits are established in accordance with LAC 33:IX.1113.C.1. These requirements will be retained from the current permit, effective June 1, 2002.

[NOTE: The sample data for Total Copper, Total Lead, and Total Zinc provided in the application addenda (dated March 20, 2007 and May 9, 2007) were evaluated and determined to be below treatable levels for the BPJ/BAT state empirical limits. Therefore, no limits or monitoring requirements will be established in the draft permit for these pollutants.]

Storm Water Pollution Prevention Plan (SWP3) Requirements

In accordance with LAC 33:IX.2707.I.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the

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effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these types of plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

B. Outfall 002 - treated sanitary wastewater

Treated sanitary wastewater being discharged to a discrete outfall receive BPJ limits and monitoring requirements according to the following schedule:

PARAMETERS	MONTHLY AVERAGE	WEEKLY AVERAGE	MONITORING FREQUENCY
Flow (MGD)	Report	Report	1/6 months
BOD ₅	---	45 mg/L	1/6 months
TSS	---	45 mg/L	1/6 months
Fecal Coliform (COLONIES/100 ml)	---	400	1/6 months
pH	6.0 S.U. (Min)	9.0 S.U. (Max)	1/6 months

(*1) The statistical basis for Fecal Coliform shall be a daily maximum in lieu of a weekly average.

Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements will be retained from the current permit, effective June 1, 2002.

BOD₅, TSS, and Fecal Coliform - limits are established in accordance with the LDEQ Sanitary Discharge General Permits. These requirements will be retained from the current permit, effective June 1, 2002.

pH - limits are established in accordance with LAC 33:IX.1113.C.1. These requirements have been retained from the current permit, effective June 1, 2002.

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X. TMDL Waterbodies:

Subsegment No. 090204 of the Pearl River Basin is listed on the 2006 Final Integrated 303(d) List as being impaired with Dissolved Oxygen (DO) (EPA-Category 5) and Mercury. To date, no TMDL assessments have been completed for this waterbody. The TMDL assessments for this subsegment are scheduled to be completed by 2008-2009. Based on an evaluation of the discharges, it was determined that the permittee has a small potential to discharge constituents that could contribute to the impairment for DO. However, based on sample data provided in the 2006 Application which showed no presence of Mercury in the effluent, it was determined that the permittee has no potential to discharge constituents that could contribute to this impairment. Therefore, the limits and monitoring requirements for TOC and BOD₅ will be retained in the draft permit.

A reopener clause will be established in Part II of the permit to allow for more stringent or additional limitations or requirements to be placed in the permit, if needed, as a result of a future TMDL.

XI. Compliance History/DMR Review:

A compliance history/DMR review was performed for the period of March 2005 through March 2008:

A. DMR Excursions Reported

Date	Parameter	Outfall	Reported Value	Permit Limit
08/07	Total Iron	003	3.81 mg/L	3 mg/L
04/07	Total Iron	001	3.66 mg/L	3 mg/L
04/07	Total Iron	003	7.51 mg/L	3 mg/L
03/07	Total Iron	001	9.8 mg/L	3 mg/L
03/07	Total Iron	003	5.75 mg/L	3 mg/L
02/07	Total Iron	001	3.81 mg/L	3 mg/L
12/06	Total Iron	001	6.67 mg/L	3 mg/L
12/06	Fecal Coliform	002	> 1,000 COL/100 ml	400 COL/100 ml
11/06	Ammonia Nitrogen	001	19.7 mg/L	10 mg/L
11/06	Total Chromium	003	0.198 mg/l	0.15 mg/L
10/06	Total Iron	001	4.03 mg/l	3 mg/L

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Date	Parameter	Outfall	Reported Value	Permit Limit
09/06	Total Iron	001	4.03 mg/l	3 mg/L
01/06	Total Iron	001	3.6 mg/l	3 mg/L
12/05	TSS	002	74 mg/L	45 mg/L

(*1) The December 2006 DMR for Outfall 003 could not be located.

Additionally, there were several DMRs for Outfalls 001 and 003 which reported flow values, but indicated "No Discharge" for the parameters required to be monitored by the permit. During a conversation between Barry Begue and Sonja Loyd on March 20, 2007, Mr. Begue indicated that he was instructed by LDEQ personnel to report flow data (calculated using a rain gauge measurement and the area drained) even if they were not able to collect a sample during business hours. Mr. Begue was advised that flow data should only be reported when samples are collected for monitoring purposes.

B. Inspection - The most recent inspection was performed on March 20, 2007. The inspection report noted that the permittee has experienced 14 effluent violations since the last inspection which was performed in 2001.

C. Compliance History - None

XII. ENDANGERED SPECIES

The receiving waterbody, Subsegment No. 090204 of the Pearl River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Ringed Map Turtle and Gulf Sturgeon, which are listed as a threatened species. The draft permit and statement of basis will be submitted to the FWS for review in accordance with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, LDEQ has made a preliminary determination that the issuance of the LPDES permit is not likely to have an adverse effect upon the Ringed Map Turtle and Gulf Sturgeon. However, after consultation with the FWS, the LDEQ may choose to modify this permit based on information provided by the FWS. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

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XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List